



*Project*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, Ca. 94105-3901

February 15, 1994

Robert E. Beehler  
Area Manager  
Hollister Resource Area  
Bureau of Land Management  
20 Hamilton Court  
Hollister, CA 95023

Dear Mr. Beehler:

The U.S. Environmental Protection Agency (EPA) has reviewed the **Draft Environmental Impact Statement (DEIS) for the Clear Creek Management Area Plan/RMP Amendment**, San Benito and Fresno counties, California. Our review and comments are provided per your request and pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Regulations (40 CFR Parts 1500-1508), and our authorities under §309 of the Clean Air Act.

The DEIS evaluates alternatives for managing natural and recreational resources within the Clear Creek Management Area (CCMA). The preferred alternative includes dry condition/seasonal road closure in the CCMA; an enhanced public asbestos hazard information program; a vehicle decontamination facility; watershed improvement projects; increased road/trail restrictions; protection of the San Benito Evening Primrose populations in the CCMA; and expansion of the San Benito Mountain Natural Area.

EPA's Record of Decision for the Atlas Mine Superfund Operable Unit states that BLM had "indicated that it will revise its land use plan for the CCMA in order to minimize airborne asbestos emissions and their threat to public health represented by the asbestos in the CCMA" (emphasis added). The Record of Decision also states that EPA will evaluate whether BLM's CCMA Management Plan is adequate to protect human health and the environment and then decide whether further action under the Comprehensive Environmental Response, Compensation, and Liability Act is necessary in the CCMA.

EPA objects to the preferred alternative based on the potential human health risks in the CCMA posed by exposure to asbestos, a known human carcinogen. We do not believe that the preferred alternative minimizes airborne asbestos emissions or

the associated public health risk. In addition, water quality, soils, and unique biological resources in the CCMA are degraded as a result of past and current human activities including mining and recreation.

Last April, BLM requested EPA's input on the Preliminary DEIS. EPA and BLM staff and managers met to discuss specific issues regarding the preferred alternative and information in the Preliminary DEIS. Moreover, EPA Deputy Regional Administrator John Wise and BLM State Director Ed Hastey met to discuss management of the CCMA and cost recovery for the Atlas Mine Superfund Site. In a June 29, 1993, letter, EPA provided you with extensive and specific comments on the Preliminary DEIS. We expressed objections to the preferred alternative based on the potential human health risks posed by exposure to asbestos in the CCMA, as well as impacts to water quality, soils, and unique biological resources. We recommended that the DEIS include additional information regarding existing conditions and potential impacts to human health, air and water quality, and soil and biological resources, and discuss **effective** mitigation, enforcement, and monitoring that BLM would implement in order to ensure the appropriate level of protection of human health and natural resources in the CCMA.

For example, we submitted extensive comments regarding health risks, none of which were addressed in the DEIS. We also recommended that the EIS address in greater detail such issues as how the County roads and CCMA trails would be effectively closed during dry conditions; public health risk education and health risk reduction through additional mitigation measures; and nonpoint source water quality control measures to improve the degraded watershed, including riparian areas. It appears that most of our comments and recommendations were not addressed, and the DEIS is very little changed from the Preliminary DEIS.

We urge BLM to satisfy its earlier commitment to minimize asbestos emissions and their public health threat in the CCMA by implementing **aggressive** management measures. We also recommend that measures be implemented to improve water quality, soil stability, and riparian and upland vegetation. Our specific recommendations are enclosed.

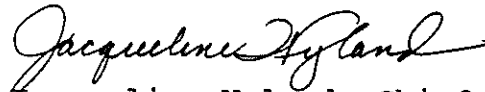
Furthermore, we have identified additional information which should be included in the final environmental impact statement (FEIS) regarding existing conditions and potential impacts to human health, air and water quality, and soil and biological resources. Our specific comments regarding necessary additional information are enclosed.

Based on our objections to the proposed management plan and the need for additional information in the FEIS, we have rated this DEIS as EO-2 -- Environmental Objections-Insufficient

Information. Please see the enclosed "Summary of Rating Definitions and Follow-Up Actions."

We are scheduled to meet with your staff on February 23 to discuss some of these issues. We trust that the FEIS will respond in full to our enclosed comments. Please send two copies of the FEIS to this office when it is officially filed with our Washington, D.C., office. If you have any questions, please contact me at (415) 744-1584, or have your staff contact Jeanne Geselbracht at (415) 744-1576.

Sincerely,



Jacqueline Wyland, Chief  
Office of Federal Activities

Enclosures

001426/93-457

filename: CLEARCK.DEI

cc: Monterey Bay Unified Air Pollution Control District  
San Joaquin Valley Unified Air Pollution Control District  
Regional Water Quality Control Board-Central Coast Region  
Regional Water Quality Control Board-Central Valley Region  
California Dept. of Toxic Substances Control

### General Comments

1. The preferred alternative does not satisfy EPA's concerns regarding public health risk. Furthermore, we do not believe that it comports with BLM's earlier commitment to minimize emissions and public health risk or with Executive Order No. 11644 which requires that federal agencies manage off-highway vehicle (OHV) areas to preserve public health, safety, and welfare. We urge BLM to adopt additional measures to reduce airborne asbestos emissions and their threat to public health in the CCMA.

2. The discussion of unavoidable adverse impacts on page 29 of the DEIS should identify the significance of the impacts. Furthermore, these impacts do not appear to be unavoidable. We believe that appropriate mitigation measures can and should be taken to reduce impacts to below a level of significance. Pursuant to 40 CFR 1502.14(f), the EIS must "[i]nclude appropriate mitigation measures not already included in the proposed action or alternatives." BLM has indicated that they believe such detailed information is not commensurate with the level of analysis that is normally presented in Resource Management Plans (RMP). Although this EIS is an amendment to the RMP, we believe that more specific activity planning and analysis in this document are appropriate. Information regarding impacts to health and environmental resources in the CCMA as well as the anticipated effectiveness of specific measures taken to mitigate those impacts is critical for the decisionmaker to determine the appropriate alternative. Inasmuch as these measures are integral to the alternative's efficacy in protecting human health and improving environmental resources as well as its ability to provide a pleasurable recreation experience, they should be identified in the EIS. BLM should commit to these measures in the amended Resource Management Plan Record of Decision.

3. Pursuant to 40 CFR 1502.14(a), the EIS must "[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." We believe the EIS should evaluate an alternative which would close the entire ACEC to motor vehicles. In addition, the EIS should include a discussion regarding BLM's consideration of alternate OHV recreation sites and explain why alternate sites were eliminated from further consideration.

4. We understand that there is some question regarding the ultimate fate of the County roads within the CCMA. The EIS

should evaluate alternatives for management of these roads should they be reverted to BLM ownership/management.

5. The June, 1992, Planning Criteria for this EIS indicates that areas outside of the Serpentine ACEC are also contaminated with asbestos, including stream sediments, landslides, and isolated serpentine rock outcrops. We recommend that BLM reconsider the boundaries of the ACEC and determine whether revisions should be made to include these other areas of concern.

6. The EIS should provide more detailed information on the user education/awareness program that would be implemented under the preferred alternative. We understand that a volunteer policing program staffed by off-road vehicle users is under consideration as part of this program. The FEIS should discuss this and other measures that could be used to warn users of the health hazards, educate users regarding restrictions and the reasons for those restrictions, and enforce user restrictions.

7. The EIS should discuss the enforcement measures that would be used to ensure protection of natural resources such as water quality and vegetation in the CCMA.

8. We recommend that BLM consider additional mitigation measures to reduce exposure to asbestos in the CCMA, such as requiring permits for riders and limiting the number of days per year one may use the area.

#### Health Risk Assessment

We recommend that the EIS provide a much more detailed summary of the risk assessment with all the assumptions, considerations, and uncertainties. Our specific comments follow.

1. The EIS needs to include a full and honest disclosure of the public health risks associated with the CCMA, including inhalation exposure to asbestos. Chapter 3 of the EIS should clearly state that there are many uncertainties in the risk assessments which have been performed for the ACEC and indicate the magnitude of risk calculated by the Berkeley researchers. It is important that the caveats be disclosed up front and their significance not be diminished by relegating them to Appendix B. Our specific comments regarding uncertainties are as follows:

a. In conformance with standard practice, the uncertainties associated with estimates need to be addressed formally as part of the decisionmaking process. For example, upper confidence

limits must be calculated for each risk estimate, and risk management decisions should be based upon such upper limits.

b. For assessing site specific risks, the acceptable risk range is generally applied to upper bound estimates of risk, not the most probable estimates of risk. The DEIS (p. 40) presents estimates of risk that may not be true upper bound estimates and does not even discuss the range of uncertainty associated with the risk estimates. Therefore, the EIS should discuss EPA's range of acceptable risks with proper caveats.

c. Although the DEIS (p. 40) presents some of the sources of uncertainty associated with applying the numbers presented in Table 3, it ignores many of the other sources discussed in detail during the development of the risk assessment document. These include, but are not necessarily limited to, questions concerning the extrapolation of phase contrast microscopy (PCM) data to transmission electron microscopy (TEM) data, the reconciliation of BLM measurements with measurements from the Cooper, et al., and Popendorf and Wenk studies, the uncertainty in the slope factor employed in the calculations, and the uncertainty in the manner in which the slope factor employed in the calculations was applied to the measurements. The discussion on page 40 is misleading in suggesting that the degree of uncertainty associated with the risk estimates is limited to differences in personal habits and is therefore relatively small.

d. Without indicating the degree of uncertainty associated with the estimates of risk presented in Table 3 (p. 41), this table falsely suggests that these estimates of risk are known with certainty.

e. It is unclear what is meant by the cancer risk being 5 in 100,000 or 2 in 100,000. The uncertainty of these numbers could vary by orders of magnitude (e.g., from 5 in 10,000,000 to 5 in 1,000). This should be reflected properly in the EIS. It is unclear whether the numbers derived from the Cooper et al. and Popendorf and Wenk studies were considered. Those numbers were quite a bit higher than the numbers derived from the BLM data.

2. The EIS should provide the specific assumptions that were used in the risk assessment, including any climatic assumptions, user intensity (number of users on an average day) and the definition of the average motorcycle user. The EIS should explain that the exposure assumptions used by BLM are not consistent with guidelines used by local Air Pollution Control Districts in California which, if used, would probably result in a significant increase in risk. Furthermore, we do not believe

that exposure assumptions based upon limited comments by OHV users at an EPA public meeting, are appropriate. If more reliable data are not collected regarding exposure, the EIS should include a strong caveat regarding the exposure assumptions.

In addition, it does not appear that some important exposure differences were taken into account. Examples include potential differences in exposure among the various trails and hill climbs and increased frequency of use with a larger number of off-highway vehicle users in a smaller area. Also, when discussing the dose of asbestos, the EIS should indicate the size distribution and along with the number of fibers inhaled. Dose estimates that do not take into account the distribution of structure sizes cannot be used to predict risk.

3. The preferred alternative would include dry/high dust seasonal closure of the CCMA to off-road vehicles based on OSHA standards. It is unclear how the standards would be applied. Would recreationists be required to wear personal asbestos monitors? Would the CCMA be closed only when **background** levels exceed the standard? Personal monitors would be the only way to determine personal exposure, to which OSHA standards apply. If the CCMA would be closed only when **background** levels exceed the OSHA standard, off-highway vehicle users could be exposed to asbestos concentrations much higher than the standard on days when background levels are lower than the standard. The EIS should discuss how asbestos levels would be monitored and describe the measures that would be implemented to ensure that riders are not exposed to asbestos levels exceeding the intended standard. The EIS should also acknowledge that there are no OSHA standards for "public health and safety" (DEIS, p. 38). OSHA standards apply to occupational settings. Appropriate limits for non-occupational exposures (e.g., at Superfund sites) are generally set based on site-specific risk considerations and are generally stricter than OSHA limits because they account for inclusion of children and the elderly in the exposed population.

4. The DEIS refers to chrysotile as the "short-fiber" type of asbestos. However, chrysotile asbestos is not necessarily short fiber asbestos and it is not generally referred to as such. It is unclear that there are necessarily differences in the cancer potency of the various types of asbestos, as long as one properly accounts for size and shape when quantifying exposure.

5. The EIS should indicate the maximum reasonable exposure for recreationists not riding OHVs. In general, Figure 1 (Appendix B) needs to be clarified so that all assumptions incorporated in

each scenario are apparent. For example, state clearly the length of time assumed for each specific activity within a day's exposure.

6. The EIS should discuss each alternative's potential health effects on children using the area, who have a much higher risk of developing mesothelioma. Even limited exposure to asbestos during childhood can result in mesothelioma in adults.

7. The risk assessment should address the continuing offsite exposure to individuals who visit the CCMA and their families from asbestos dust carried offsite on clothing and vehicles.

8. The EIS should discuss the anticipated effectiveness of additional measures that would be included in the preferred alternative to reduce emissions of and human exposure to asbestos. Anticipated changes in use intensity should also be considered. For example, if use intensity increases with a smaller open area, would exposure increase?

9. Regarding cancer risk to smokers (Appendix B, p. 2), the relative risk to asbestos-exposed smokers are not fixed but vary with many factors associated with the degree of smoking and the level and type of exposure in any particular environment.

10. The estimate of risk to mining and milling of chrysotile comes from the multiple studies conducted at mines in one area of Quebec. Although exposures associated with mining and milling of chrysotile may be more like the types of exposures that occur at Clear Creek than exposure in some of the other work environments and with some of the other fiber types whose slope factors also contribute to the EPA unit risk factor (URF), other confounding factors may also affect relative potency. For example, differences in the size distribution of fibers from Quebec and Clear Creek may result in a totally different relative risk associated with exposure in the two areas. Also, differences in the ratio of PCM measured asbestos concentrations to concentrations of the specific asbestos structures that relate to risk at the Quebec mines and at Clear Creek may limit the degree to which the slope factor derived from the mining studies relate to Clear Creek exposures. Thus, assuming that use of the EPA URF results in an overestimate of risk of between seven and 200, the EIS may be misleading; the actual error introduced by this factor may be smaller or larger.

11. The factor of 50 quoted on page 4 of Appendix B for the uncertainty associated with using the URF from EPA with the exposure estimates derived from the exposure study presented in



this appendix is probably small. It may be closer to a factor of 100 to 1,000, and it may go in either direction, based on new information (Wayne Berman, personal communication). This factor should properly be taken into account in deriving upper bound estimates to risk.

12. BLM should conduct effective monitoring that relates to the risks associated with asbestos using a method that incorporates appropriate counting rules (i.e., interim Superfund method or ISO method) and analysis by TEM. However, as suggested by the risk assessment for the area, it may be possible to derive a significant correlation between appropriate TEM measurements and PCM measurements for this unique area so that the less expensive method may be used for a subset of sample analysis. It is possible that such correlations may vary from location to location within the CCMA so that separate correlations would have to be established for different areas. If monitoring is to be performed using an appropriate TEM method, establishing correlations would be unnecessary.

#### Air Quality

1. Pursuant to §176(c) of the Clean Air Act, all federal agencies have an affirmative responsibility to assure that their activities conform to the applicable implementation plan as approved for the area. On November 30, 1993, EPA published a Final Rule in the Federal Register on "Determining Conformity of General Federal Actions to State or Federal Implementation Plans." The final rule applies to federal (non-transportation) activities which affect non-attainment or maintenance areas. The Clear Creek Management Area is located partially within Fresno County and the San Joaquin Valley which has been federally designated as a serious non-attainment area for both PM10 (particulates smaller than ten microns) and ozone; and partially within San Benito County, which is a moderate non-attainment area for ozone. It appears that the requirements of the Final Rule on general conformity do not apply to the proposed action (see applicability discussion, specifically §93.153(c)(2)(ii), of the rule). The BLM should nonetheless make its own determination as to whether the proposed action is indeed exempt from the conformity requirements and address this issue in the EIS.

2. According to page 92, under the preferred alternative, "the impact of roads and hillclimbs is estimated to contribute about 8,640 tons of sediment per year, primarily in the Clear Creek watershed." The EIS should estimate annual PM10 emissions to air that could result from each alternative.

3. The DEIS states that "other common automotive emissions will not be discussed because asbestos, a known human carcinogen, is considered a more serious public health risk" (page 36). This is not a sufficient reason for omitting analysis of emissions of other pollutants, particularly in air basins that are designated as non-attainment for any pollutant. In light of the ozone non-attainment status of both San Benito and Fresno counties, the EIS should identify the ozone-related air quality impacts that would result from the preferred alternative.

4. Pursuant to Executive Order No. 11644, BLM is required to monitor the effects of use of OHVs on lands under its jurisdiction. BLM should routinely monitor air quality in the CCMA in order to determine whether management measures are adequate. Executive Order No. 11644 also states, "[o]n the basis of the information gathered, they shall from time to time amend or rescind designations of areas or other actions taken pursuant to this order...."

5. Pursuant to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), standard for roadways at 40 CFR 61.143, "[n]o person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material, unless...it is encapsulated in asphalt concrete...." The EIS should indicate whether any of the roadways it maintains in the CCMA contains asbestos tailings or waste from any asbestos mining activity and, if so, what measures would be implemented to ensure compliance with the NESHAP.

#### Watershed Impacts and Water Quality

1. Pursuant to §319 of the Clean Water Act (CWA), states have the lead role in identifying and controlling nonpoint sources of pollution. In California, the State Water Resources Control Board (SWRCB) has been designated as the lead agency for implementation of the §319 Nonpoint Source Management Program. Pursuant to CWA §319(b), SWRCB prepared a State Nonpoint Source Management Program (SMP), which was approved by USEPA in January, 1989. Under the CWA, federal programs and activities are subject to the federal consistency review requirements of CWA §319(b)(2)(F) and §319(k). These sections require federal agencies to submit specific assistance programs and development projects to the lead state nonpoint source agency (SWRCB) for review for consistency with California's SMP.

2. It is BLM's responsibility to implement appropriate Best Management Practices (BMPs) to enable full protection of beneficial uses of surface waters, attainment of surface water

quality standards, and compliance with the Federal Antidegradation Policy (40 CFR 131.12).

The EIS should specify what BMPs and nonpoint source pollution control measures would be utilized to assure water quality protection as well as how and when these measures would be implemented and monitored for implementation, effectiveness, and validation. The FEIS should also describe how BMPs, standards and guidelines, and other measures designed to minimize water quality impacts from BLM activities would ensure compliance with the Antidegradation Policy. The EIS should discuss how BMPs in the 1984 CCMA Watershed Management Guidance have been implemented, how successful they have been, and whether revisions need to be made to this Guidance. BLM should coordinate with SWRCB and the Central Coast and Central Valley Regional Water Quality Control Boards (Regional Boards) to develop BMP implementation and monitoring procedures. In addition, we recommend that BLM refer to USEPA Guidance Specifying Management Measures for Nonpoint Pollution in Coastal Waters (May, 1991), which addresses the latest available technology for management measures to control nonpoint sources.

3. Pursuant to the Federal Antidegradation Policy, existing instream water uses and water quality necessary to protect the existing beneficial uses shall be maintained and protected. Furthermore, where quality of waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected. The FEIS should identify (1) the designated beneficial uses for water bodies on in the CCMA; and (2) any waters within the planning area classified as "high quality." This information, which will facilitate in establishing a baseline for BLM management, can be obtained from the Regional Boards through their Water Quality Assessment Report and individual water quality control plans.

4. Pursuant to Executive Order No. 11644, BLM is required to monitor the effects of the use of OHVs on lands under its jurisdiction. Furthermore, pursuant to 1505.2(c), the Record of Decision must include a summary of the monitoring and enforcement program where applicable for any mitigation. Therefore, it would be appropriate for the FEIS to include a more detailed description of the water quality monitoring that will be conducted in the CCMA. In addition, we recommend that riparian areas be monitored for any adverse impacts to their physical and biological integrity. The EIS should identify parameters to be monitored, specific standards or goals to be met, action levels, and actions if thresholds are exceeded.

In addition, monitored parameters should reflect the conditions of riparian habitats and fisheries. BLM should also carry out bioassessments in surface waters. Bioassessments are particularly valuable in detecting effects of nonpoint sources of pollution including sediment loadings. Data collected should be entered into USEPA's STORET database to facilitate sharing data with other water quality managing agencies. We recommend that BLM enter biological data collected into STORET's BIOS database. We urge BLM to commit to implementing a water quality monitoring program in the EIS and the Record of Decision for the CCMA.

5. BLM should conduct a baseline water quality assessment and include the results in the EIS. If data are available from the U.S. Geological Survey monitoring station, they should be included in the EIS. This information is important for the development, analysis and selection of measures to adequately protect and/or enhance water quality.

6. Under the preferred alternative, the reduction in open roads and hillclimbs would decrease human disturbance by approximately 71 percent (p.93). The EIS should discuss how this figure was calculated. BLM should ensure that assumptions such as existing intensity of use for each area, season of use, and expected increases or decreases in use intensity have been appropriately factored into watershed models.

7. Aside from OHV restrictions, the only "watershed stabilization improvements" included in the preferred alternative would be controls constructed within the water courses (check dams, stream armoring). These are positive measures which should serve to check headcutting and streambank erosion. However, they would not improve or stabilize highly erodible soils on slopes, roads and trails that have been denuded of vegetation. Moreover, the preferred alternative allows for hillclimbs in several stream courses. We note that the Clear Creek OHV Feasibility Study Phase Two Report September (1991) states that stream "crossings should be fenced to prevent unauthorized travel along the riparian areas" (page 26). Furthermore, Executive Order No. 11644 provides that off-road vehicle "[a]reas and trails shall be located to minimize damage to soil, watershed, vegetation, or other resources of the public lands."

We urge BLM to **effectively** close all stream courses to OHV use and implement other erosion control practices to stabilize soils on all affected areas of the watersheds by reestablishing native and endemic riparian and upland vegetation.

8. According to the BLM, OHV restrictions in the Clear Creek riparian area and San Benito Natural Area are commonly violated by motorcyclists. The EIS should discuss how roads, trails, and hillclimbs to be closed under the various alternatives would **effectively** exclude OHV use. The EIS should discuss specific measures, including their expected effectiveness and benefits to nonpoint source pollution control. The EIS should also discuss enforcement procedures, monitoring, and contingency measures should the exclusion measures fail. BLM should work with the California Regional Water Quality Control Board, Central Coast and Central Valley regions, to develop these measures.

9. According to page 29 of the DEIS, under the preferred alternative surface water quality would be affected by increases in sedimentation. Are these increases over current (no action) sedimentation rates? This appears inconsistent with statements elsewhere in the document that the preferred alternative would reduce sediment yield by 71 percent.

#### Biological Resources

1. We understand that the U.S. Fish and Wildlife Service has recently conducted formal consultation with BLM pursuant to Endangered Species Act §7 for the San Benito evening primrose. The EIS should include the biological opinion and discuss the recovery plan which is scheduled to be finalized this year.

2. Segments of the riparian zone and other areas (e.g., hillclimbs) in the CCMA are denuded and devoid of vegetation. In some areas soil has been completely stripped down to bedrock. Twenty-seven serpentine endemic plant species, with varying degrees of rarity, are located on the CCMA. Pursuant to section 101 of NEPA, federal agencies are responsible for conservation of biodiversity. The EIS should discuss remedial measures that BLM would take in order to reestablish vegetation in the riparian zone and on closed trails, hillclimbs and other areas that have been denuded from past activities in CCMA.

3. The EIS should describe the existing condition of the Clear Creek riparian zone, the effect that its juxtaposition with the County road has, and what effect current BLM management has on the overall health of the riparian zone. The EIS should give specific baseline information regarding species composition and density. The EIS should also discuss specific mitigation measures that BLM will implement to restore the Clear Creek riparian zone, success criteria for restoration, and effectiveness monitoring measures.

### Roads and Trails

1. Executive Order No.11644 requires OHV trails to be located to minimize damage to soil, watershed, vegetation, or other resources of the public lands. We urge BLM to consider impacts to resources, including riparian habitat, water quality, endemic species populations, and soil conditions, in addition to public health (e.g., closing trails with highly erodible/friable soils or soils containing high amounts of asbestos), when determining the fate of specific roads and trails.
2. The EIS should discuss the nonpoint source pollution control measures that BLM will implement at staging areas to prevent erosion and runoff of sediment and other pollutants into Clear Creek.
3. The EIS should clarify what the seasonal (or dry period) closure of roads in the CCMA would entail, describe how such closure would be enforced, and specify the kind of maintenance that would be conducted by BLM.